CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Looker Alternative Practice
Proposed Implementation Date:	January 2020
Proponent:	MT DNRC
Location:	N2SE4NE4, Section 16-T2N-R8E
County:	Park County
Land Owner:	State of Montana
HRA#:	N/A

I. TYPE AND PURPOSE OF ACTION

The type of action the Proponent is requesting is a SMZ Alternative Practice to Rule 4: (36.11.304), *Equipment Operation in the SMZ.*

The action would allow equipment to skid trees within the outer ~25 feet of two overlapping SMZ's of unnamed Class 2 streams. Trees would be skidded ~200 within the SMZ's along the natural slope of the land, which is ≤15%, and delivered to a landing area outside of the SMZ's. Equipment operation would be restricted to frozen and/or snow-covered ground conditions. Approximately 30-40 thousand board feet of forest products would be skidded within the SMZ.

The purpose of the action would be to facilitate the recovery and removal of forest products for a timber permit.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

A field review was conducted on November 9, 2019 by DNRC Forester C. Barone along with Ron Myrstol and Craig Kamps of Timber Resource Management, Inc and November 14, 2019 by DNRC Forester C. Barone and Unit Manager Craig Campbell.

Other contacts:

J. Schmalenberg, DNRC Science Program Supervisor and Manager

C. Campbell, DNRC Bozeman Unit Manager

P. Rennie, DNRC Archeologist

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

None.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: Not approve the Alternative Practice.

Action Alternative: Implementation of Alternative Practice as proposed with additional mitigation measures.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Parent materials are a loamy alluvium over residuum from weathered sandstone and shale. Soils are deep, well drained and moderately permeable. Soil resistance to erosion, rutting and compaction is moderate to low. The proposed activity is located on gentle slopes (<15%), would be conducted on frozen and/or snow-covered and would implement Best Management Practices (BMP's) and any recommended mitigations measures. Due to the short length of SMZ's affected, open, gentle slopes, short duration of the proposed activity, conducting operations during frozen and/or snow-covered ground conditions and implementation of additional mitigation measures, no significant impacts or long-term impacts to soils are expected.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Is it possible that implementing this Alternative Practice would impact the integrity of the SMZ and these specific functions?

1. Ability to act as an effective sediment filter.
2. Ability to provide shade to regulate stream temperature.
3. Protection of stream channel and banks.
4. Ability to provide large, woody debris for eventual recruitment into the stream to maintain riffles pools and other elements of channel structure.
5. Promotes floodplain stability.

The project is located where the Stream Management Zones (SMZ's) of an intermittent Class 2 stream and a Class 2 spring overlap. There are no fisheries and neither stream return flow to any other body of water. There is an open meadow area ~45 feet in length within the overlap area and the slope is ≤15%. The SMZ's of both streams are 50-foot. Equipment would be allowed to operate and skid logs through the center of the open meadow area for ~200 feet while within the SMZ's.

1. The topography along the designated skidding lane is gentle (≤15%) and vegetated with grasses, forbs and a few trees. All activities would be conducted on frozen and/or snow-covered ground conditions and equipment operation would be restricted to the designated skidding lane. Skidding process would deposit slash from limbs for an additional sediment filter. Impacts to the SMZ's to act as an effective sediment filter are not expected.

2. Only a couple of small trees in the open meadow area would be removed. No vegetation outside of the designated skidding lane/open meadow area would be removed. Impacts to provide shade to regulate stream temperature are not expected.

3. Activities would occur within the designated skidding lane/open meadow area only. There would be no crossing of stream banks or channel. Adverse impacts to stream channel and banks are not expected.

4. Activities would occur within the designated skidding lane/open meadow area only. No vegetation outside of the designated skidding lane/open meadow area would be removed. Impacts to provide large, woody debris for eventual recruitment into the streams are not expected.

5. Activities would occur within the designated skidding lane/open meadow area only and no vegetation outside of the designated skidding lane/open meadow area would be removed. Equipment operation would be restricted to the designated skidding lane. Impacts to floodplain stability are not expected.

Due to the short length of SMZ's affected, open, gentle slopes, short duration of the proposed activity, conducting operations during frozen and/or snow-covered ground conditions and implementation of additional mitigation measures, the proposed project should not adversely impact the integrity and specific functions of the SMZ's as identified in the SMZ law (77-5-301[1] MCA). No significant impacts or cumulative effects are expected to occur to water quality, water yield, watershed conditions, fisheries or any other beneficial uses associated with the watersheds adjacent to the proposed project areas or any downstream tributaries.

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The proposed project includes burning of logging slash. Localized short duration particulate emissions occur during slash burning. Slash burning is normally conducted in late October through November. The DEQ and the Cooperative Airshed groups regulate particulate emissions during this period. Burning times are coordinated to 1) limit burning periods of acceptable smoke dispersion and 2) to limit the cumulative generation of particulates.

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

All activities would be conducted on frozen and/or snow-covered ground conditions. Activities would occur within the designated skidding lane/open meadow area only which is predominately open meadow. No vegetation outside of the designated skidding lane/open meadow area would be removed. Equipment operation would be restricted to the designated skidding lane, no equipment would be in the stream channel and on the stream banks. Skidding process would deposit slash from limbs along the designated skidding lane for an additional sediment filter. The proposed activities would not affect the overall cover type or change the vegetative community.

No rare plants or cover types are known within the proposed project area.

Due to the short length of SMZ's affected, open, gentle slopes, short duration of the proposed activity, conducting operations during frozen and/or snow-covered ground conditions and implementation of additional mitigation measures, no adverse impacts to vegetative communities are expected from the proposed action.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.
Would implementing this Alternative Practice impact the ability of the SMZ to support diverse and productive aquatic and terrestrial habitats?

The main draw is an intermittent Class 2 stream and the small spring is a perennial Class 2 stream. The proposed activity would restrict equipment operation to the designated skidding lane and no equipment would be in the stream channel and on the stream banks. Due to the short length of SMZ's affected, open, gentle slopes, short duration of the proposed activity, conducting operations during frozen and/or snow-covered ground conditions and implementation of additional mitigation measures, no impacts are expected to wildlife, birds and fish, or aquatic and terrestrial habitats.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

The proposed project area is located in potential Gray Wolf, Grizzly Bear, Wolverine and Canada Lynx habitats. Occasional or transient use within the proposed project area could occur.

No plant species of concern have been identified within the proposed project area.

Due to the short length of SMZ's affected, open, gentle slopes, short duration of the proposed activity, conducting operations during frozen and/or snow-covered ground conditions and implementation of additional mitigation measures, no adverse impacts to the fisheries, threatened or endangered species or other species of concern within this watershed are expected from the proposed action.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

A field inspection of the timber permit project area was conducted I 1995 by the DNRC archaeologist and found no further investigative work was warranted. A Class I (literature review) level review was conducted in 2019 by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. No additional archaeological investigative work will be conducted in response to this proposed permit because there is a low potential for adversely effecting Heritage Properties.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The project area is not visible to any populated area. Due to the short duration and small area, topography, location and activity proposed, impacts concerning aesthetics are not expected.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

None.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

None.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

None.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

None.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

People are currently employed in the construction and wood products industry. Due to the relatively short duration and small size of the project, there would be no measurable direct, indirect, or cumulative impact from this proposed action on employment.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

People are currently paying taxes from the construction and wood products industry in the region. Due to the relatively short duration and small size of the project, there would be no measurable direct, indirect, or cumulative impact from this proposed action on tax revenues.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

There would be no measurable direct, indirect, or cumulative impacts related to demand for government services due to the short duration and small size of the project, the short-term impacts to traffic and the very small possibility of a few people temporarily relocating to the area.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

None.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

None.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

There would be no measurable direct, indirect, or cumulative impacts related to population and housing due to the relatively short duration and small size of the project, and the fact that people are already employed in the affected occupations in the region.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

None.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

None.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

None.

EA Checklist Prepared By:	**Name:**	Chuck Barone	**Date:**	December 12, 2019
	Title:	Bozeman Unit Forester		

V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative: **Implementation of Alternative Practice as proposed with additional mitigation measures.**

MEASURES RECOMMENDED TO MITIGATE POTENTIAL IMPACTS:

1) All operations/activities would be conducted during frozen and/or snow-covered ground conditions to minimize soil compaction, rutting and vegetative disturbance.
2) SMZ's would be visibly identified. Equipment operation would be restricted to the designated skidding lane/open meadow area, no equipment would be in the stream channel and on the stream banks.
3) No vegetation outside of the designated skidding lane/open meadow area would be removed.
4) Skidding process would deposit slash from limbs for an additional sediment filter. Additional slash would be added if necessary.
5) The designated skidding lane would be seeded with native grasses where soil is visibly disturbed.
6) Compliance with Alternative Practice and applicable Forestry Best Management Practices (BMP's) and Streamside Management Zone (SMZ) laws.
7) If unauthorized disturbance occurs to stream channels, banks or ground within the SMZ's, all activities would cease until the DNRC Forest Practices representative can assess the situation.

If all mitigation measures are followed this project should have no long term significant impacts or cumulative effects to the unnamed stream drainages.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I have determined that none of the anticipated environmental impacts outlined in the EA are significant according to the criteria outlined in *ARM 36.2.524*. I find that no impacts are regarded as severe, enduring, geographically widespread, or

frequent. Further, I find that the quantity and quality of various resources, including any that may be considered unique or fragile, will not be adversely affected to a significant degree. I find no precedent for future actions that would cause significant impacts, and I find no conflict with local, State, or Federal laws, requirements, or formal plans. In summary, I find that the identified adverse impacts will be avoided, controlled, or mitigated by the design of the project to the extent that the impacts are not significant.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

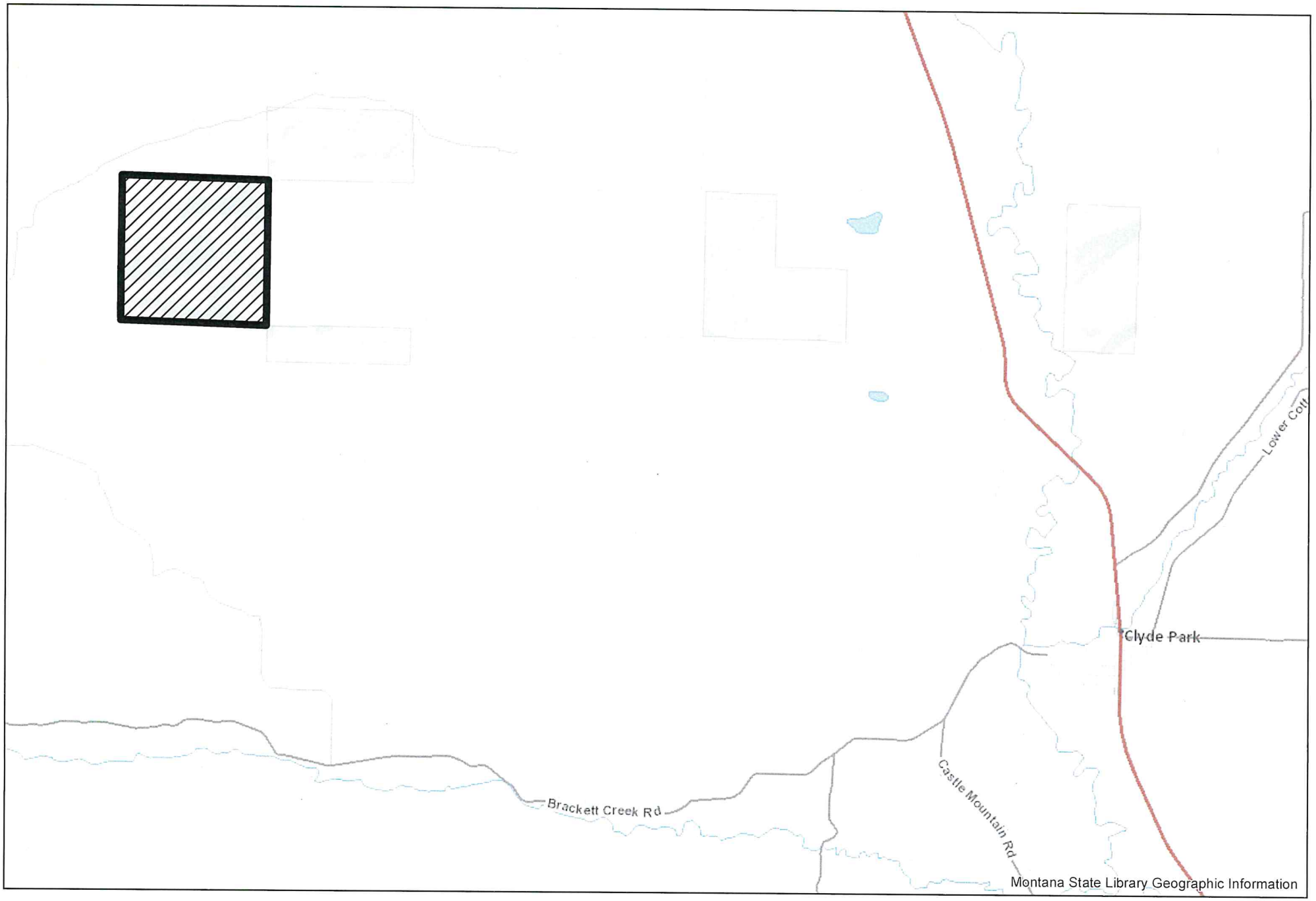
[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

EA Checklist Approved By:	**Name:**	Craig Campbell
	Title:	Bozeman Unit Manager
Signature:	Craig Campbell/s/	**Date:** 12/12/2019

ATTACHMENTS

A – Vicinity Map/Site Map

ATTACHMENT A - Alternative Practice Vicinity Map
DNRC Looker Timber Permit
Section 16-T2N-R8E, Park County



0 0.25 0.5 1 Miles

1:55,000

STATE Lands

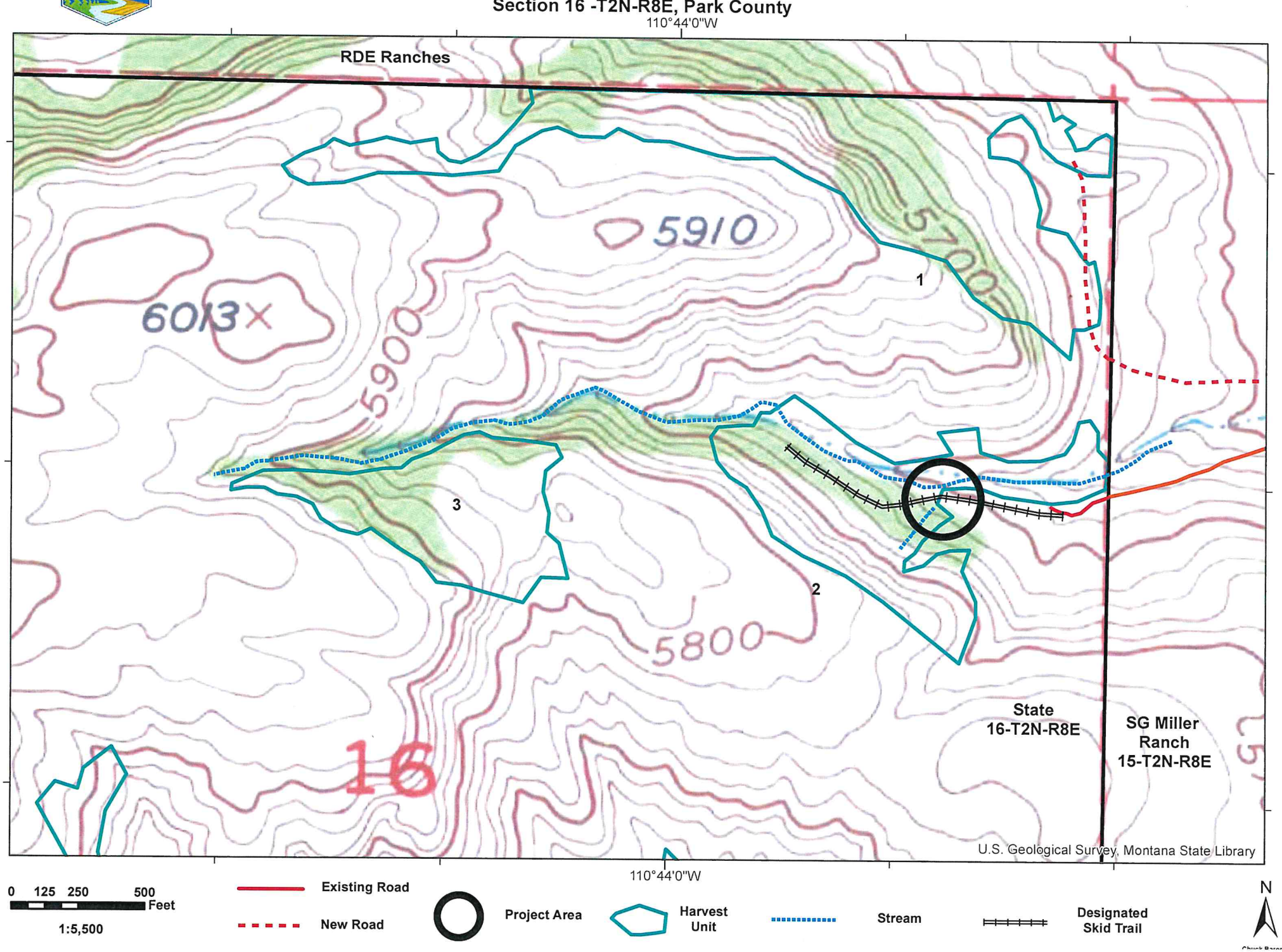
Project Area

N

ATTACHMENT A - Alternative Practice Site Map

DNRC Looker Timber Permit

Section 16 -T2N-R8E, Park County



ATTACHMENT A - Alternative Practice Site Map

DNRC Looker Timber Permit
Section 16 -T2N-R8E, Park County